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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,456	05/19/2005	Marten Johansson	BGEE 2 00113	4290
27885	7590	05/28/2008		
FAY SHARPE LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			EXAMINER FERGUSON, MICHAEL P	
			ART UNIT 3679	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,456

Applicant(s)

JOHANSSON ET AL.

Examiner

MICHAEL P. FERGUSON

Art Unit

3679

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5-10 and 14-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5-10 and 14-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB008)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 14, 2008 has been entered.

Claim Objections

2. Claims 5, 10, 14 and 19 are objected to because of the following informalities:
- Claim 5 (line 6) recites "lower flange". It should recite --lower flange half--.
- Claim 10 (line 7) recites "that applied". It should recite --that applies--.
- Claim 10 (line 10) recites "lower flange are". It should recite --lower flange half are--.
- Claim 10 (line 11) recites "engageable with". It should recite --engage with--.
- Claim 14 (line 7) recites "lower flange". It should recite --lower flange half--.
- Claim 19 (line 1-2) recites "to connect a spring arrangement". It should recite --to connect a gas-filled spring--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

3. Claim 32 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is

required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 32 (lines 1-2), which depends from claim 28, recites "wherein said flanged connection includes only one fixing element and only one locking ring". Claim 28 (lines 1-2) recites "wherein said flanged connection includes only one fixing element and only one locking ring". Claim 32 fails to further limit claim 28.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 5-9 and 19-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 1-16) recites "A flanged connection to connect a gas-filled spring in a machine tool, said flanged connection comprising... designed to receive at least a portion of the gas-filled spring... designed to engage the gas-filled spring... designed to secure the gas-filled spring... designed to apply a clamping force on said locking ring that is positioned at least partially around the gas-filled spring". Claim 8 (lines 1-3) recites "wherein said flanged connection is fitted to the machine tool... to generate the clamping force between said fixing element and the gas-filled spring". Claim 9 (line 2) recites "designed to prevent rotation of the gas-filled spring". It is unclear as to whether the gas-filled spring and the machine tool have been positively claimed as elements of the claimed flanged connection within claim 1, or whether such elements have only

been recited as intended use with the claimed connection. Claims 5-9 depend from claim 1 and are likewise rejected. For the purpose of examining the application, it is assumed that a gas-filled spring and a machine tool have only been recited as intended use within such claims.

Claim 19 (lines 1-14) recites "A flanged connection designed to connect a spring arrangement... to a machine tool, said flanged connection comprising... designed to receive at least a portion of the body of the gas-filled spring... designed to be at least partially inserted into... the gas-filled spring... designed to... apply a clamping force on said locking ring that is positioned in... the gas-filled spring... designed to at least partially secure the gas-filled spring to said flanged connect and to inhibit movement of said gas-filled spring". It is unclear as to whether the gas-filled spring and the machine tool have been positively claimed as elements of the claimed flanged connection within claim 1, or whether such elements have only been recited as intended use with the claimed connection. Claims 20-34 depend from claim 19 and are likewise rejected. For the purpose of examining the application, it is assumed that a gas-filled spring and a machine tool have only been recited as intended use within such claims.

Double Patenting

6. Claim 31 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 27. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5-9 and 19-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (US 6,371,530).

As to claim 1, Sato et al. disclose a flanged connection capable of connecting a gas-filled spring in a machine tool, the flanged connection comprising an upper flange half **13**, a lower flange half **12'**, a fixing element **28**, and a locking ring **25**, the upper flange half and the lower flange half each including a through-opening capable of receiving at least a portion of a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1), the upper flange half and the lower flange half designed to be secured together, the upper flange half and the lower flange half capable of engaging a gas-filled spring when the upper flange half and the lower flange are secured together, the locking ring designed to engage the fixing element and at least one of the flange halves when the upper flange half and the lower flange are secured together, the locking ring capable of securing a gas-filled spring by at least partial insertion into a groove of complementary design around the gas-filled spring while being fixed in position between the upper flange half and the lower flange half when the upper flange half and the lower flange are secured together, the fixing element designed to movably engagable with at least one of the flange halves when the upper flange half and the lower flange half are

secured together, the fixing element capable of applying a clamping force on the locking ring that is positioned at least partially around a gas-filled spring when the upper flange half and the lower flange are secured together, the locking ring and the fixing element are being at least two separate components, the fixing element designed to movably engage and apply a contact force against the locking ring when the upper flange half and the lower flange are secured together (Figures 1 and 4(a)-4(c)).

Examiner notes that neither a gas-filled spring nor a machine tool have been positively claimed as elements of the claimed flanged connection in claim 1; such elements have only been recited as intended use. All that is required of the limitations of claim 1 and its dependent claims is a connection capable of use with such elements. Accordingly, the Sato et al. reference has been interpreted to read on such claims.

As to claim 5, Sato et al. disclose a flanged connection wherein at least one of the flange halves **13** on its inside has a section **A** (Figure 4(a) reprinted below with annotations) inclined in relation to the central axis of the flanged connection, the inclined section designed to bring a correspondingly inclined section **B** on the outside of the fixing element **28** into engagement in order to produce the clamping force, the inclined sections designed to be movable relative to one another when the upper flange half **13** and the lower flange half **12'** are secured together (Figure 4(a)).



As to claim 6, Sato et al. disclose a flanged connection wherein the fixing element **28** has a groove **C** (annular depression **C** constitutes an annular groove; Figure 4 (a)) running along its outside and designed to bring a projecting part arranged on the inside of one of the flange halves **13** having the inclined section **A** into engagement (Figure 4(a)).

As to claim 7, Sato et al. disclose a flanged connection wherein the fixing element **28** has a recess along its inside designed to receive at least a portion of the locking ring **25** (Figure 4(a)).

As to claim 8, Sato et al. disclose a flanged connection wherein the flanged connection is capable of being fitted to a machine tool by at least one fastener **14**, the fastener capable of generating the clamping force between the fixing element **28** and a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1) and to generate a contact force between the fixing element and the locking ring **25** (Figure 1).

As to claim 9, Sato et al. disclose a flanged connection wherein the clamping force is capable of preventing rotation of a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1).

As to claim 19, Sato et al. disclose a flanged connection capable of connecting a gas-filled spring having a circular outer body to a machine tool, the flanged connection comprising an upper flange half **13**, a lower flange half **12'**, a fixing element **28**, and a locking ring **25**, the upper flange half and the lower flange half each including a through-opening capable of receiving at least a portion of the body of a gas filled spring (constituted by fluid-filled tube **11**; Figure 1), the upper flange half and the lower flange half designed to be secured together, at least one of the flange halves including an inclined section **A** in an inside face that faces the body of the gas-filled spring, the inclined section inclined in relation to a central axis of the flanged connection, the locking ring capable being at least partially inserted into a groove on an outer surface of the body of a gas-filled spring, the fixing element designed to movably engage the inclined section and apply a clamping force on the locking ring that is capable of being positioned in the groove on the outer surface of the body of a gas-filled spring when the upper flange half and the lower flange half are secured together, the clamping force capable of at least partially securing a gas-filled spring to the flanged connection and to inhibit movement of the gas-filled spring in the flanged connection, the locking ring and the fixing element are at least two separate components (Figures 1 and 4(a)-4(c)).

Examiner notes that neither a gas-filled spring nor a machine tool have been positively claimed as elements of the claimed flanged connection in claim 19; such elements have only been recited as intended use. All that is required of the limitations of claim 19 and its dependent claims is a connection capable of use with such elements. Accordingly, the Sato et al. reference has been interpreted to read on such claims.

As to claim 20, Sato et al. disclose a flanged connection wherein the through-opening in at least one of the flange halves **13,12**, is circular (Figure 1).

As to claim 21, Sato et al. disclose a flanged connection wherein the fixing element **28** includes a recess, the recess designed to receive at least a portion of the locking ring **25** (Figure 4(a)).

As to claim 22, Sato et al. disclose a flanged connection wherein the fixing element **28** includes a recess, the recess designed to receive at least a portion of the locking ring **25** (Figure 4(a)).

As to claim 23, Sato et al. disclose a flanged connection wherein the flange halves **13,12'** are connected by at least one fastener **14** (Figure 1).

As to claim 24, Sato et al. disclose a flanged connection wherein the flange halves **13,12'** are connected by at least one fastener **14** (Figure 1).

As to claim 25, Sato et al. disclose a flanged connection wherein the fixing element **28** only engages the upper flange half **13** when the upper flange half and the lower flange half **12'** are secured together (Figure 4(a)).

As to claim 26, Sato et al. disclose a flanged connection wherein the fixing element **28** only engages the upper flange half **13** when the upper flange half and the lower flange half **12'** are secured together (Figure 4(a)).

As to claims 27 and 31, Sato et al. disclose a flanged connection wherein the flanged connection includes only one fixing element **28** and only one locking ring **25** (Figure 4(a)).

As to claim 28, Sato et al. disclose a flanged connection wherein the flanged connection includes only one fixing element **28** and only one locking ring **25** (Figure 4(a)).

As to claim 29, Sato et al. disclose a flanged connection wherein the fixing element **28** is designed to move downwardly toward the locking ring **25** and apply the clamping force on the locking ring when the upper flange half **13** and the lower flange half **12'** are secured together (Figure 4(c)).

As to claim 30, Sato et al. disclose a flanged connection wherein the fixing element **28** is designed to move downwardly toward the locking ring **25** and apply the clamping force on the locking ring when the upper flange half **13** and the lower flange half **12'** are secured together (Figure 4(c)).

As to claim 32, Sato et al. disclose a flanged connection wherein the flanged connection includes only one fixing element **13** and only one locking ring **28** (Figure 4(a)).

As to claim 33, Sato et al. disclose a flanged connection wherein the lower flange half **12'** includes a recess designed to receive at least a portion of the locking ring **25** (Figure 4(c)).

As to claim 34, Sato et al. disclose a flanged connection wherein the lower flange half **12'** includes a recess designed to receive at least a portion of the locking ring **25** (Figure 4(c)).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art (Figure 1) in view of Sato et al.

As to claims 10, 14 and 15, Admitted prior art (Figure 1) discloses a method of fixing a gas-filled spring **1** in a machine tool **2**, by which method an upper flange half **4** and a lower flange half **5** of a flanged connection which can be joined together are fitted at least partially around the gas-filled spring and a locking ring **6** arranged between the flange halves is at least partially fitted around the gas-filled spring in a groove **7** of complementary design and is fixed between the flange halves securing the gas-filled spring (Figure 1).

Admitted prior art fails to disclose a method wherein, when joining together the flange halves, a clamping force is applied around the gas-filled spring by a fixing element that applies a force a force of the locking ring, wherein the locking ring and the fixing element are at least two separate components, the fixing element designed to movably engage and apply a contact force against the locking ring when the upper flange half and the lower flange half are secured together, the fixing element designed to movably engage with at least one of the flange halves when the upper flange half and the lower flange half are secured together; wherein a section inclined in relation to

the central axis of the flanged connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section on the outside of the fixing element, the fixing element being applied around the gas-filled spring with the clamping force and where appropriate being applied against the locking ring with a contact force, the inclined sections designed to be movable relative to one another when the upper flange half and the lower flange half are secured together; and wherein a groove running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves having the inclined section.

Sato et al. teach a clamping method wherein, when joining together flange halves **13,12'**, a clamping force is applied around a tube **11** by a fixing element **28** that applies a force a force of a locking ring **25**, wherein the locking ring and the fixing element are two separate components, the fixing element designed to movably engage and apply a contact force against the locking ring when an upper flange half **13** and a lower flange half **12'** are secured together, the fixing element designed to movably engage with at least one of the flange halves when the upper flange half and the lower flange half are secured together; wherein a section **A** inclined in relation to the central axis of the flanged connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section **B** on the outside of the fixing element, the fixing element being applied around the tube with the clamping force and where appropriate being applied against the locking ring with a contact force, the inclined sections designed to be movable relative to one another when the upper flange

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half and the lower flange half are secured together; and wherein a groove **C** running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves having the inclined section; fixing element **28** structurally reinforces locking ring **25** and functions as a stop to prevent overtightening during fastening of flange halves **13,12** to provide a more reliable, stronger sealing force between the flange halves, opposed to that of the prior art (Figure 5) of only having a locking ring (column 5 lines 35-56, Figures 1 and 4(a)-4(c)). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as disclosed by Admitted prior art to have the clamping force applied by a fixing element as taught by Sato et al. in order to structurally reinforce the locking ring and provide a stop to prevent overtightening during fastening of the flange halves, in order to provide a more reliable, stronger sealing force between the flange halves.

As to claim 16, Admitted prior art (Figure 1) discloses a method wherein the clamping force is generated when the flanged connection is fitted to the machine tool **2** and that the clamping force is of a predefined magnitude.

As to claim 17, Admitted prior art (Figure 1) discloses a method wherein the magnitude of the clamping force is adjusted by adjusting the tightening torque of fasteners **8** used for fitting the flanged connection to the machine tool **2**.

As to claim 18, Admitted prior art (Figure 1) discloses a method wherein the clamping force serves to prevent rotation of the gas-filled spring **1**.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 5-10 and 14-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF
05/22/08

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679